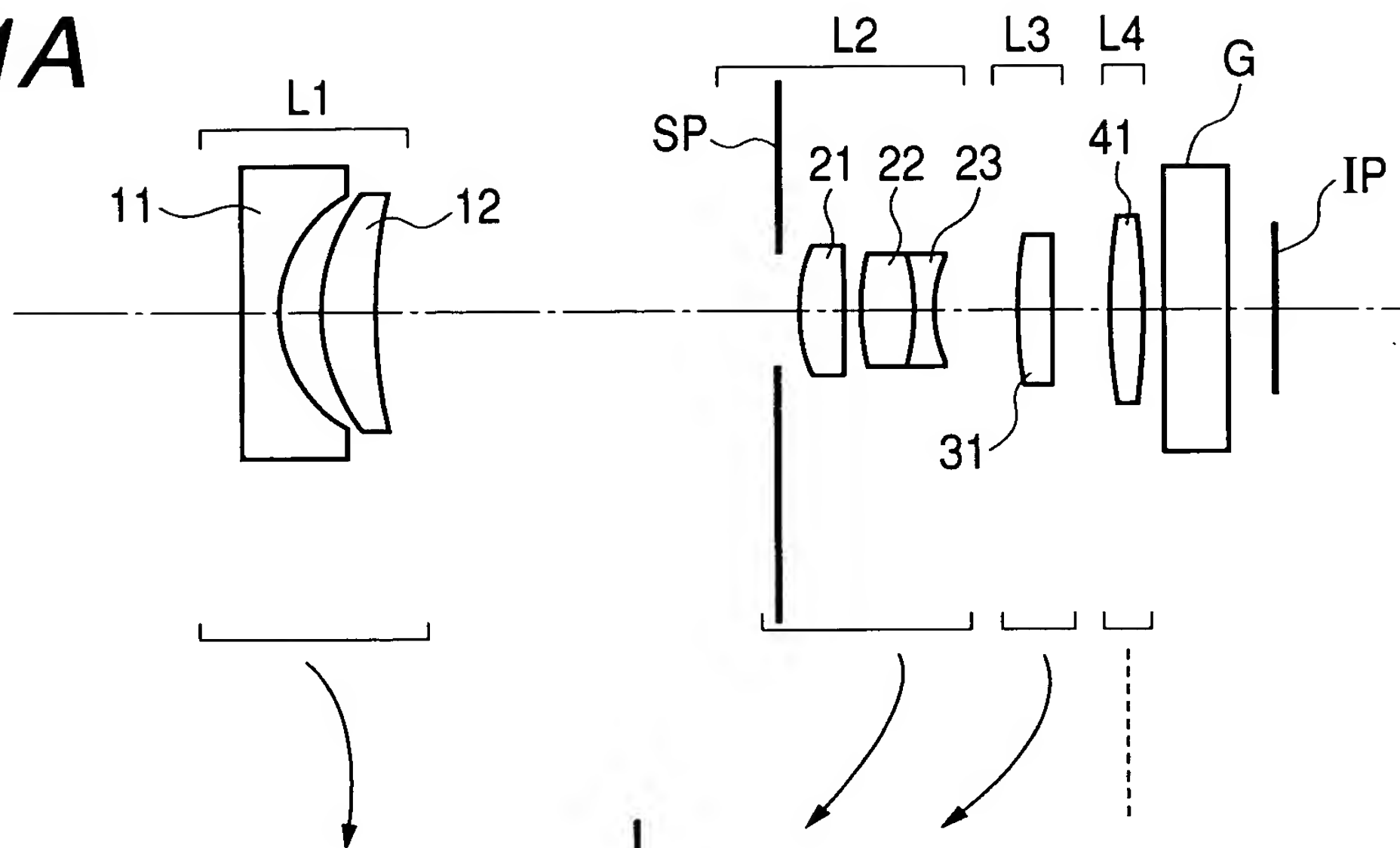
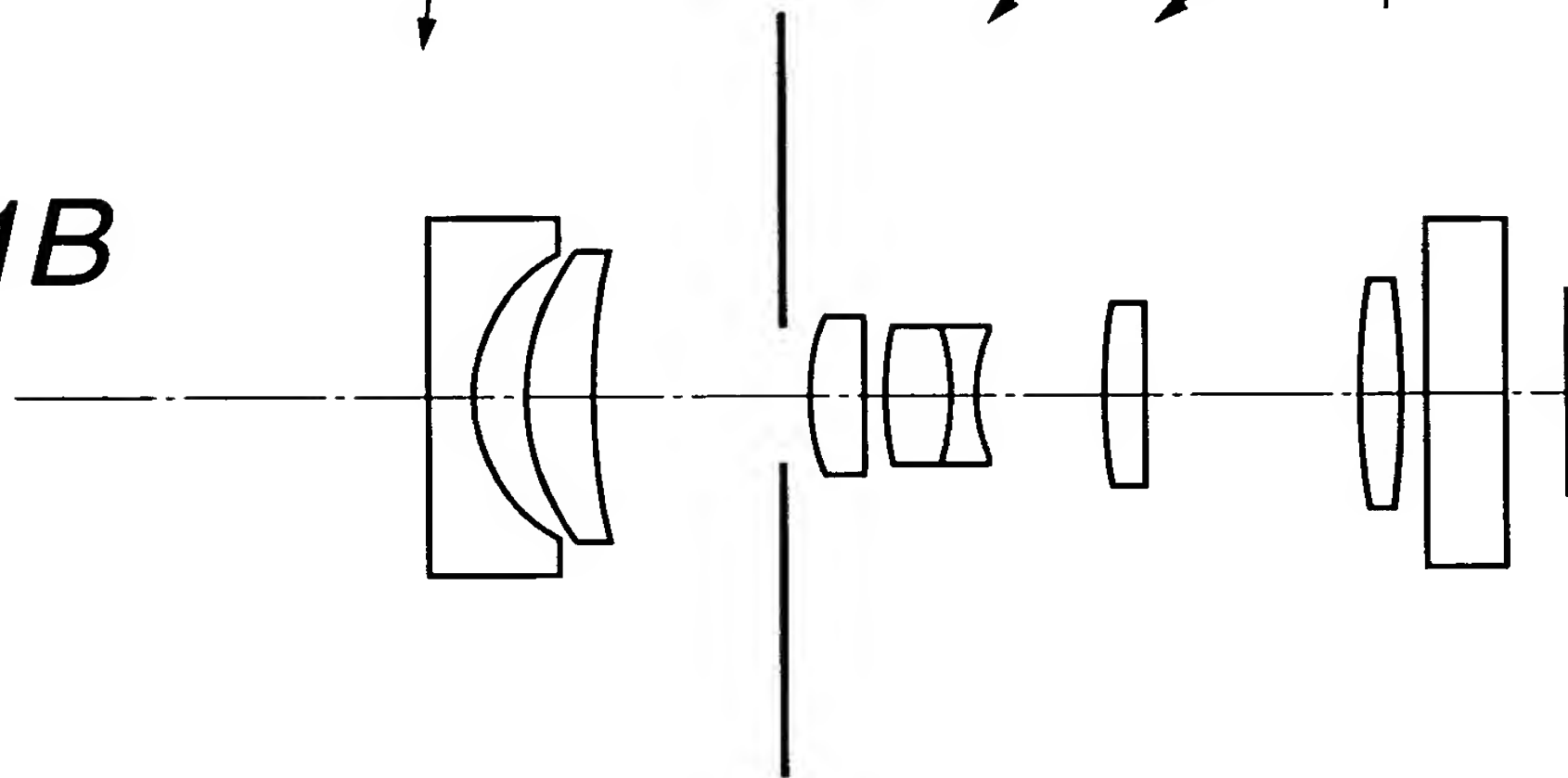


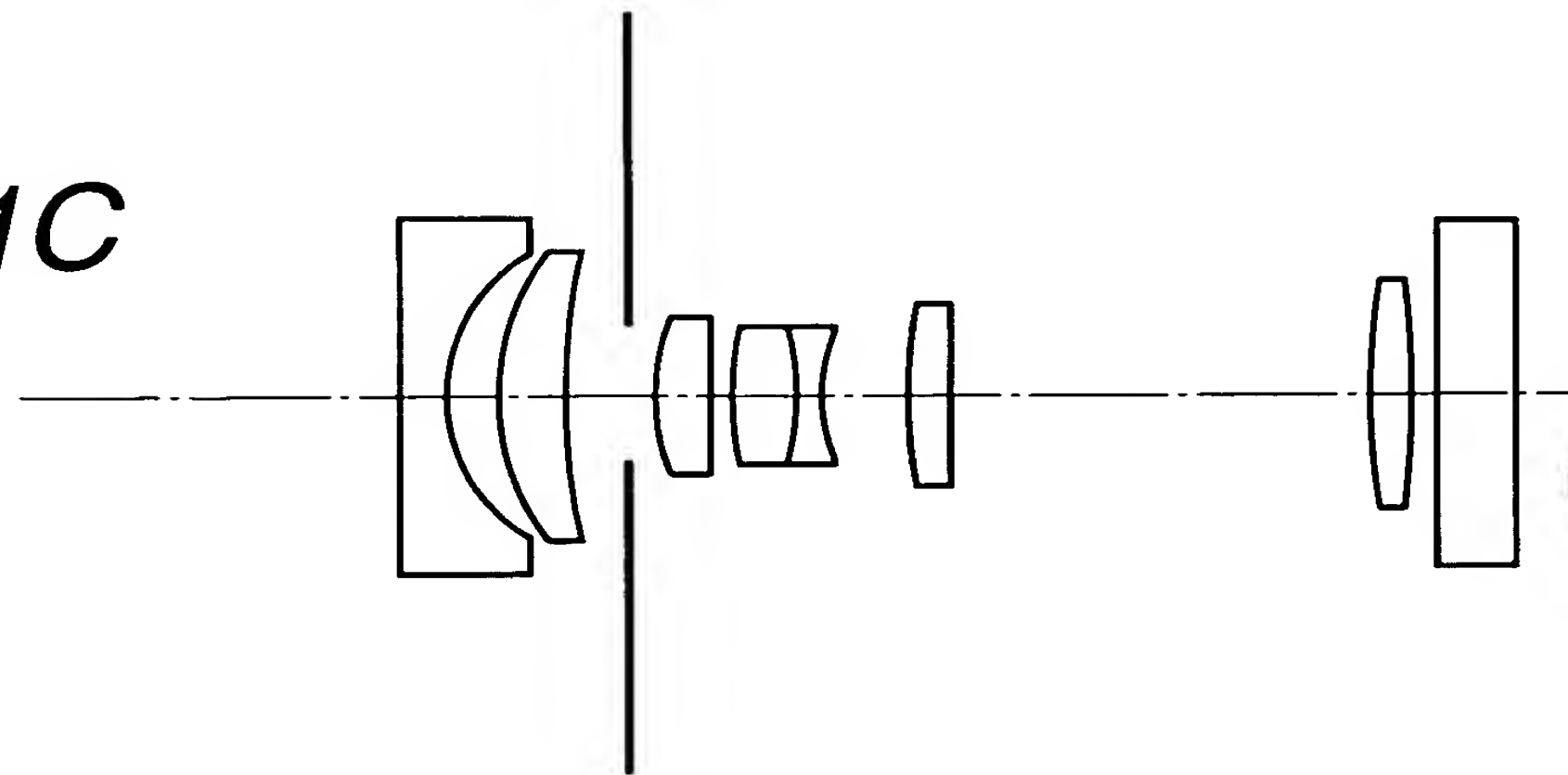
**FIG. 1A**



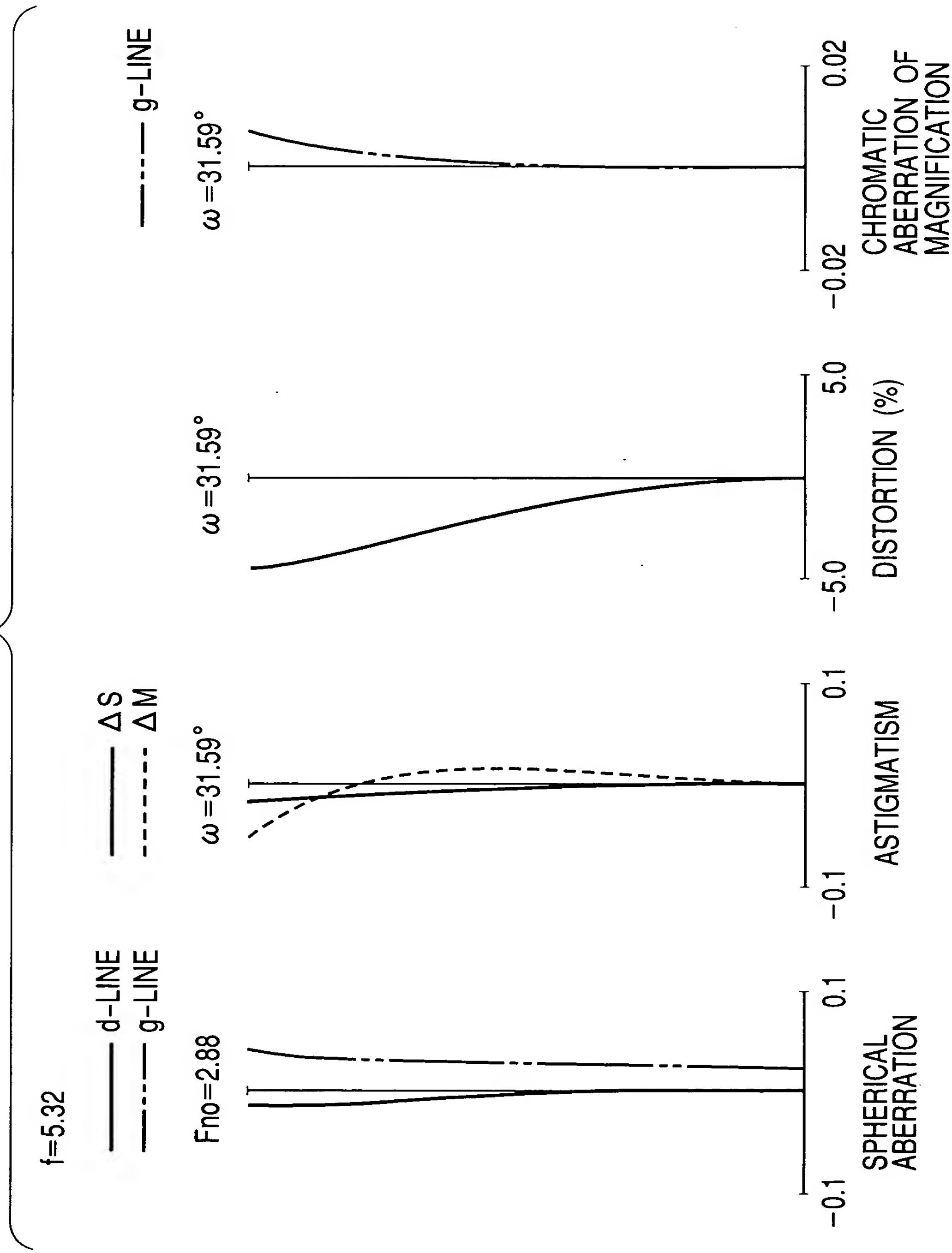
**FIG. 1B**



**FIG. 1C**



# FIG. 2



# FIG. 3

f=9.83

— d-LINE  
- - - g-LINE

—  $\Delta S$   
- - -  $\Delta M$

— g-LINE

Fno=3.90

$\omega = 18.42^\circ$

$\omega = 18.42^\circ$

$\omega = 18.42^\circ$

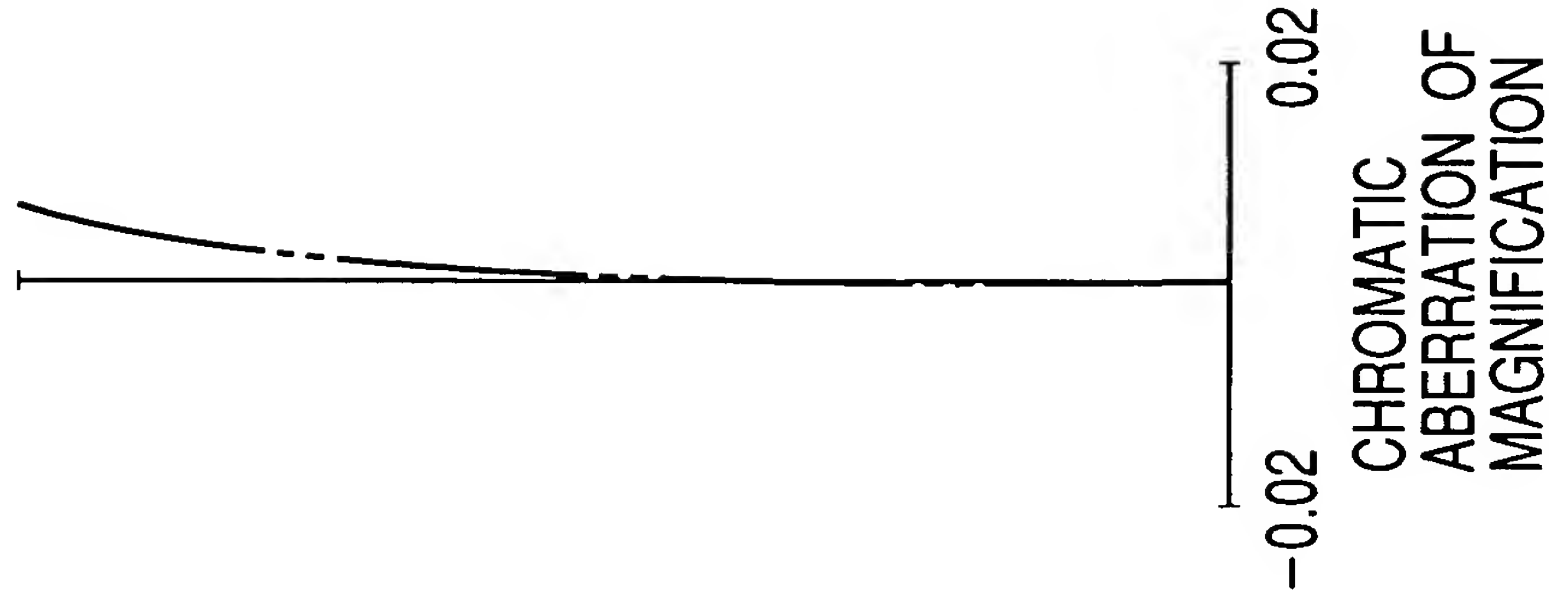
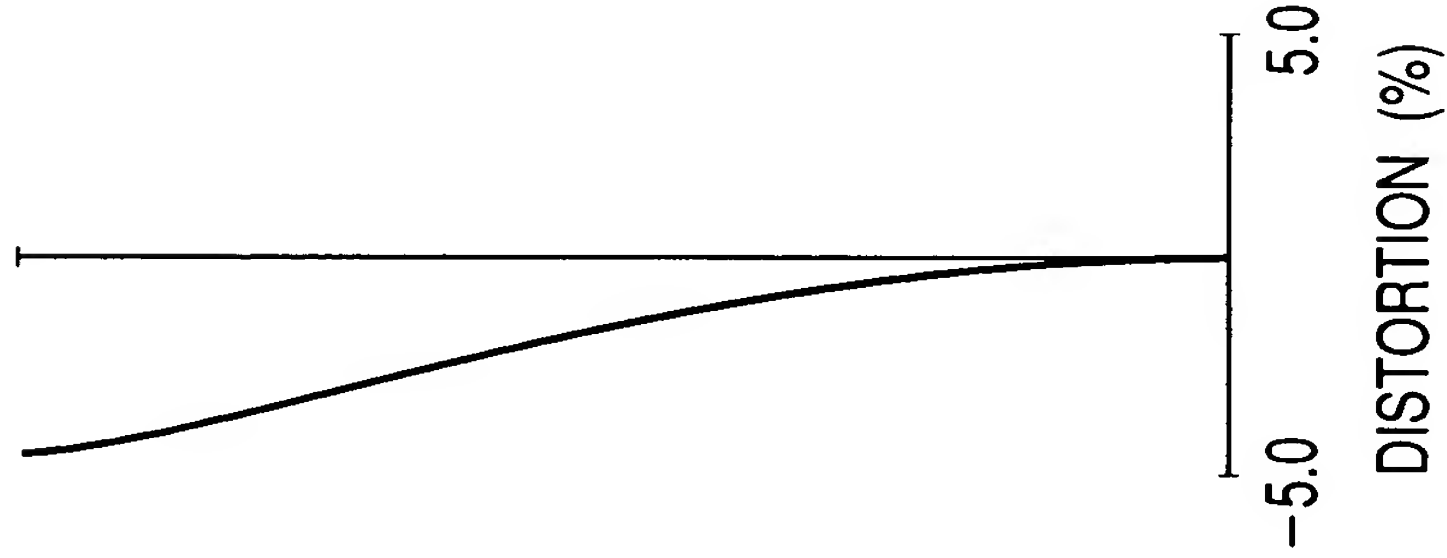
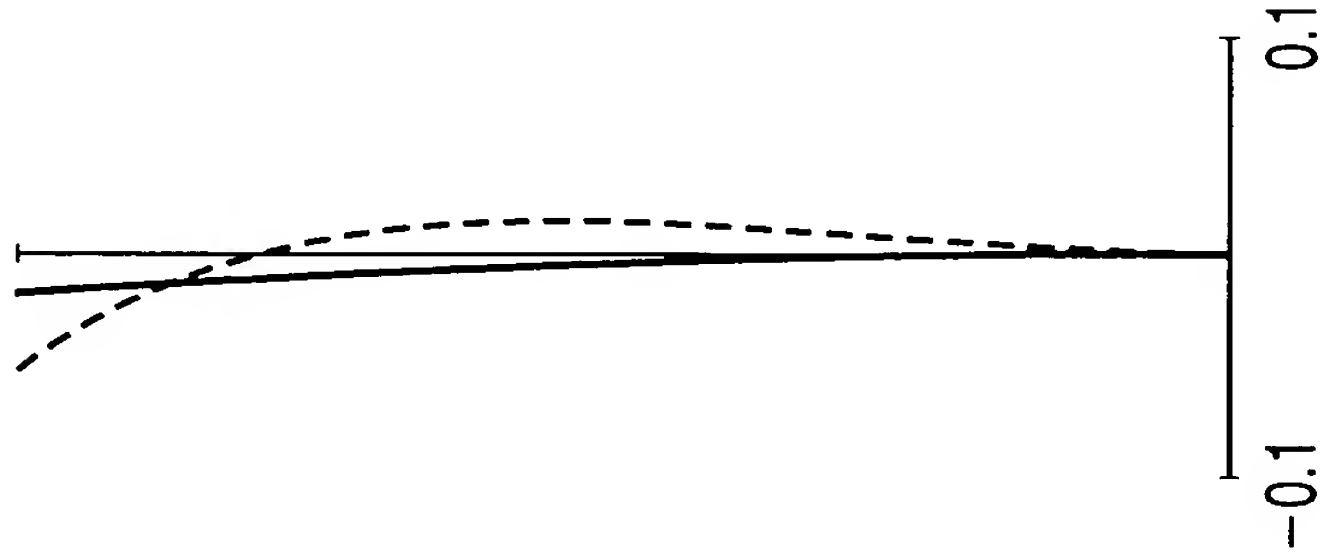
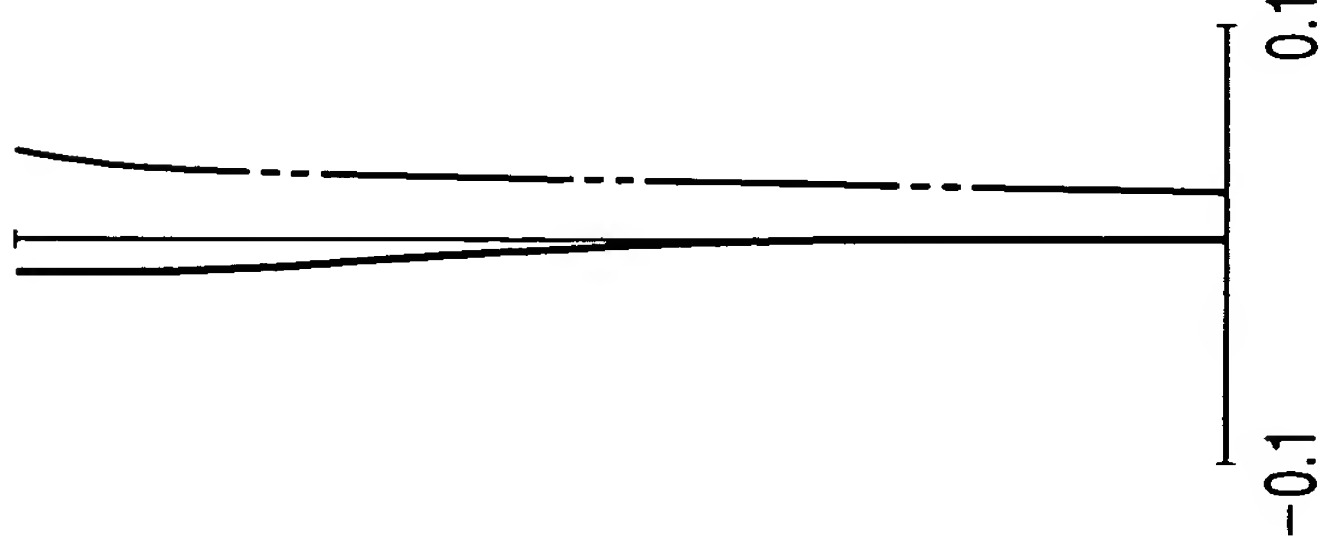
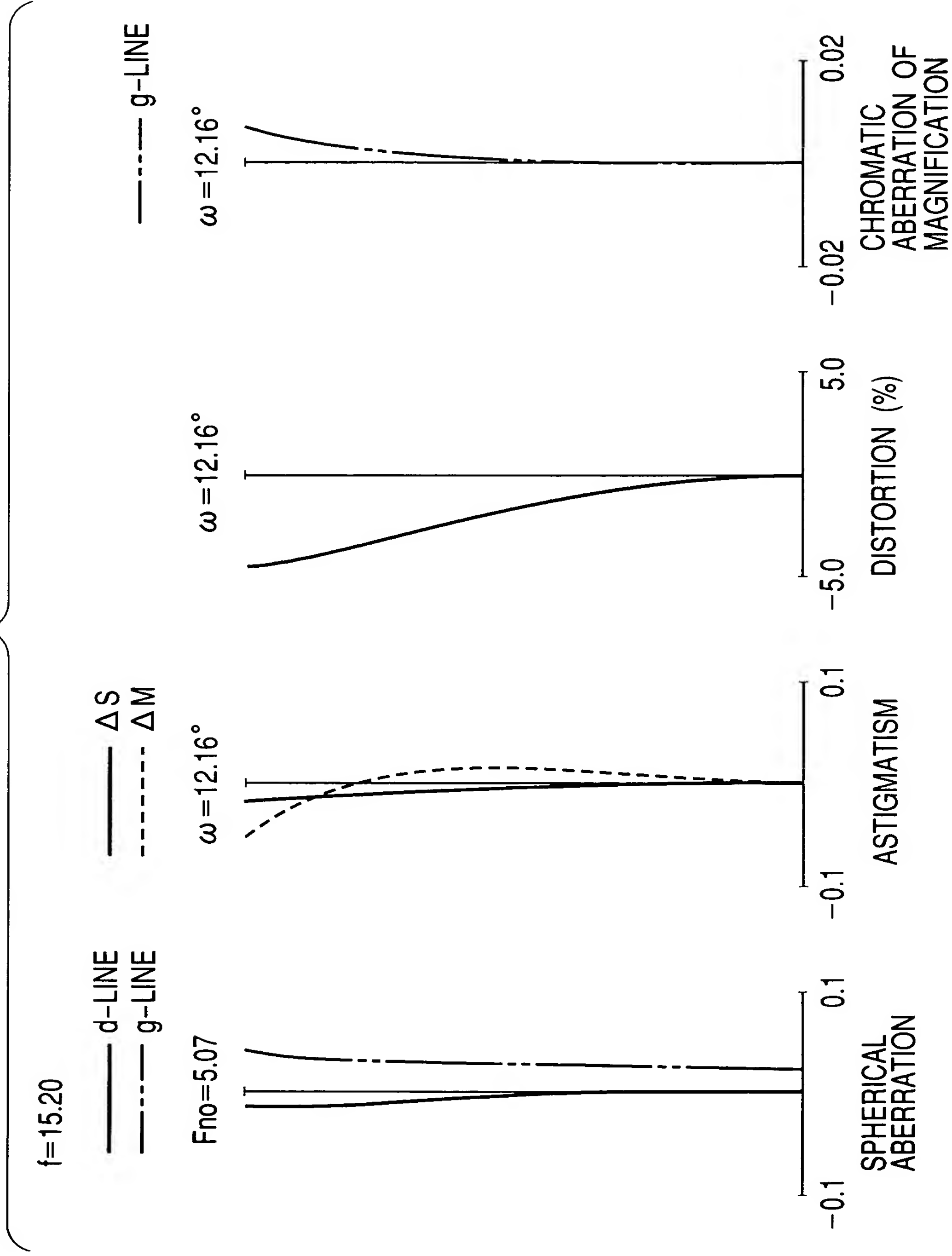
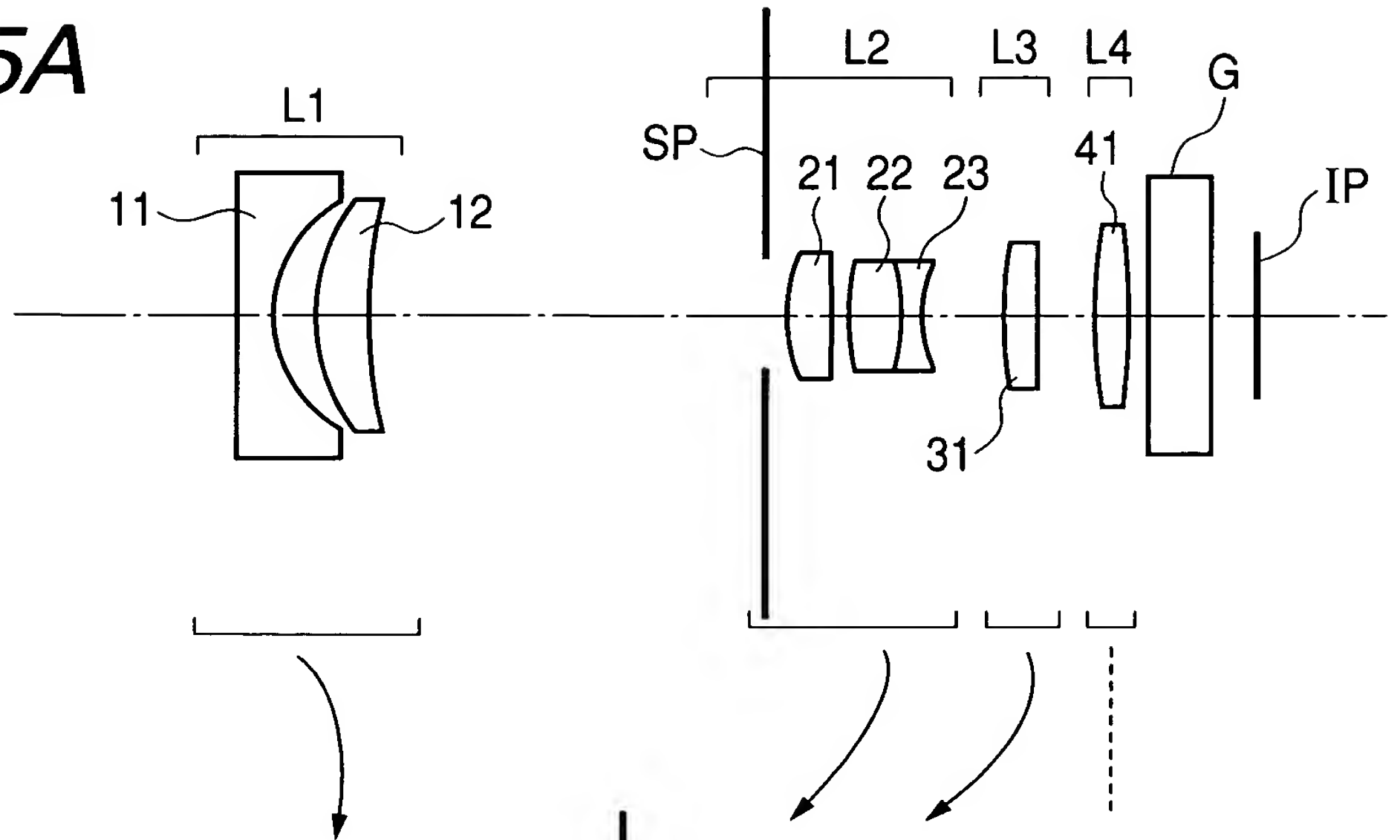
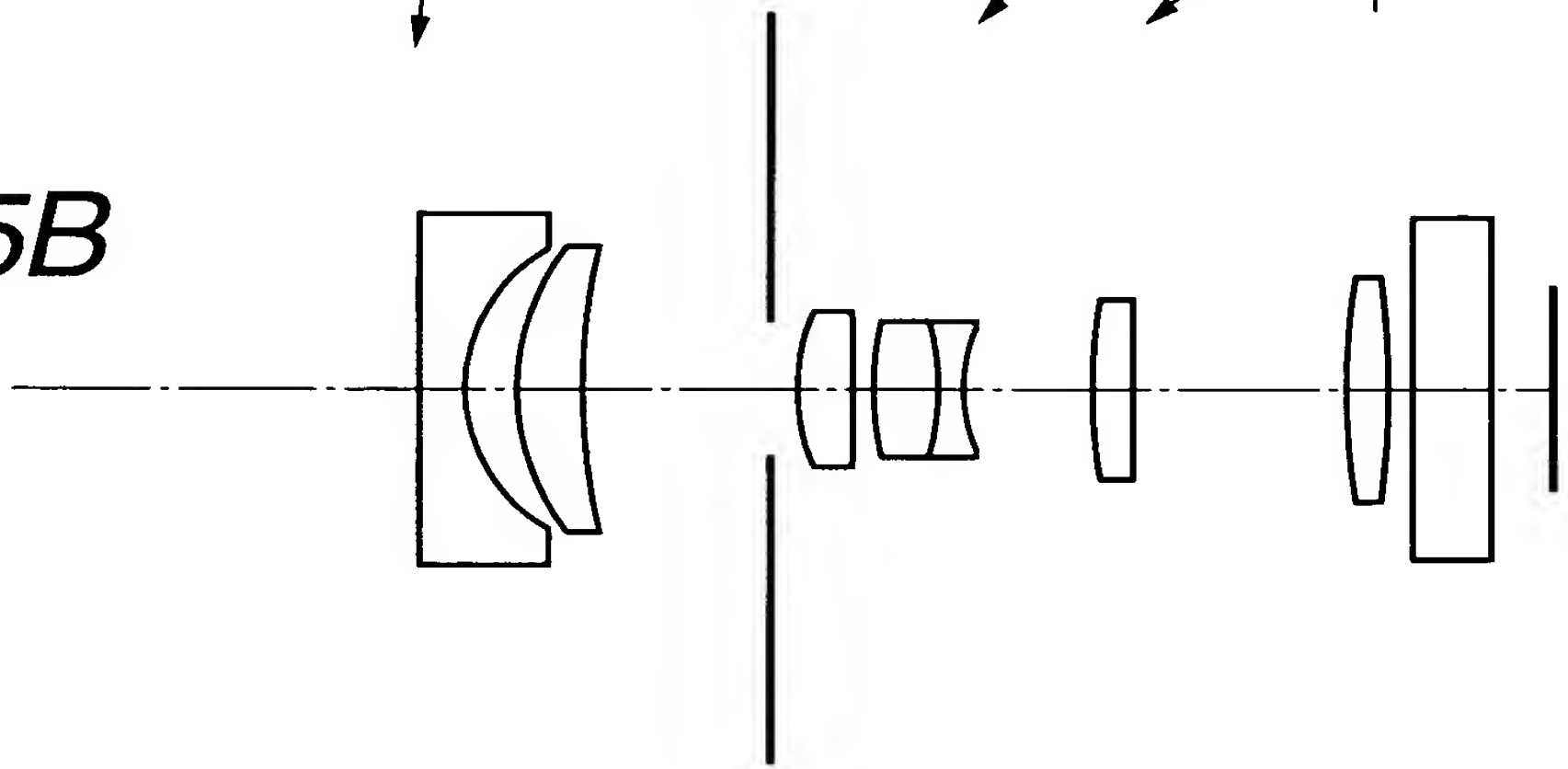
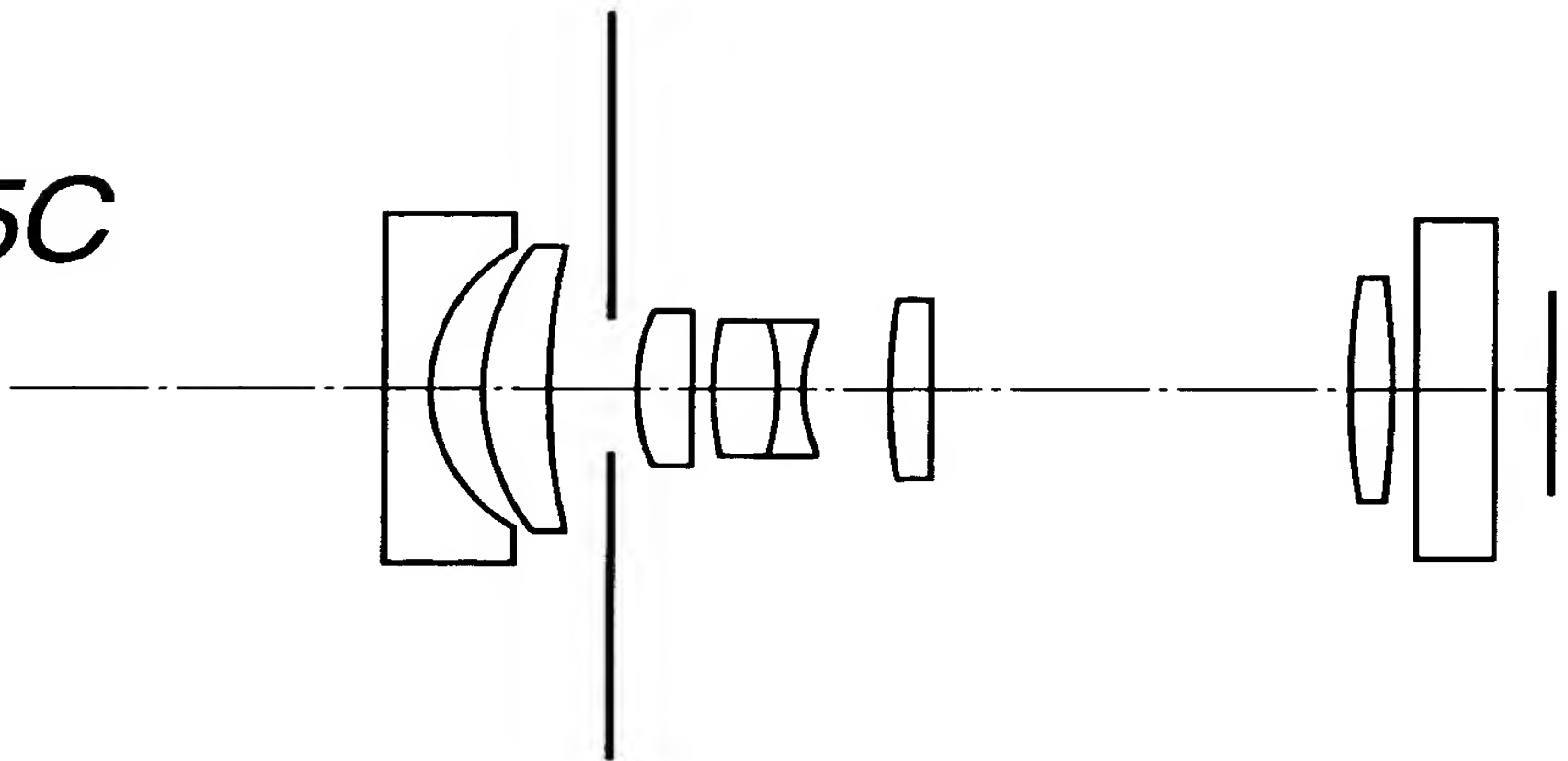


FIG. 4



**FIG. 5A****FIG. 5B****FIG. 5C**

# FIG. 6

$f=5.32$

— d-LINE  
- - - g-LINE

—  $\Delta S$   
- - -  $\Delta M$

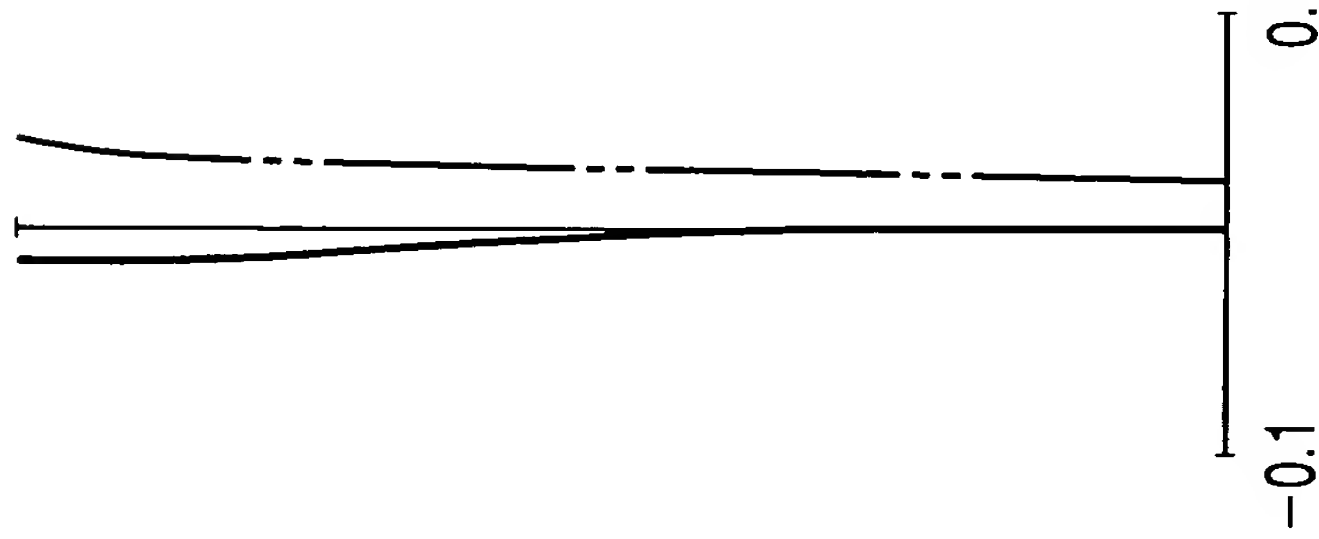
— g-LINE

$F\eta_0=2.88$

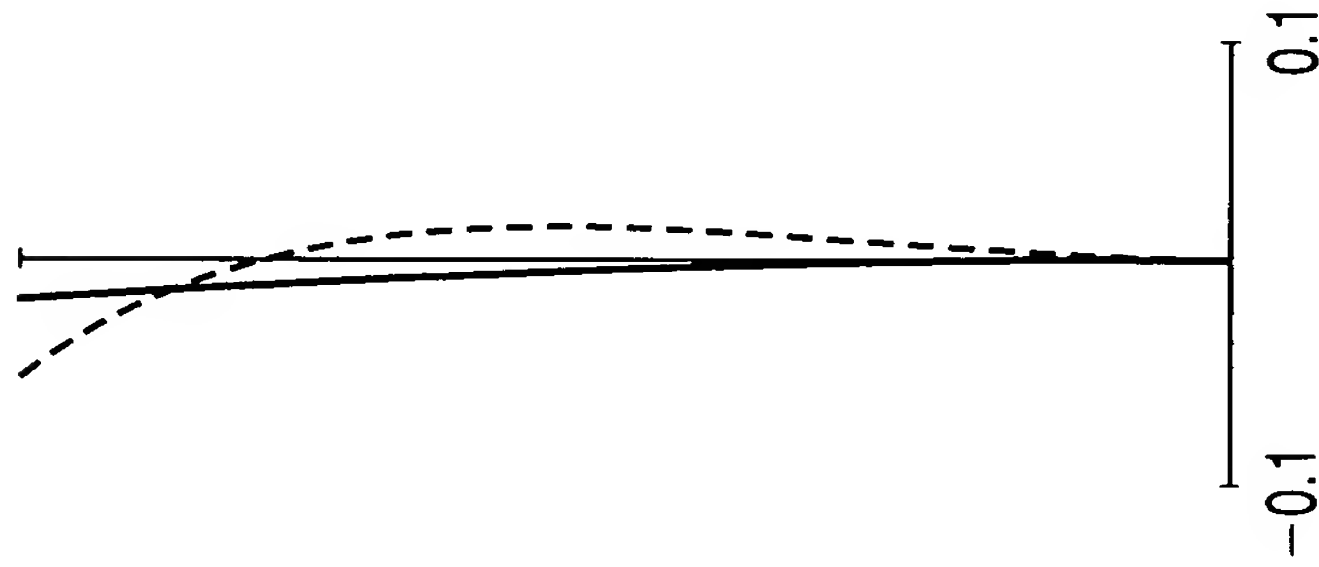
$\omega=31.60^\circ$

$\omega=31.60^\circ$

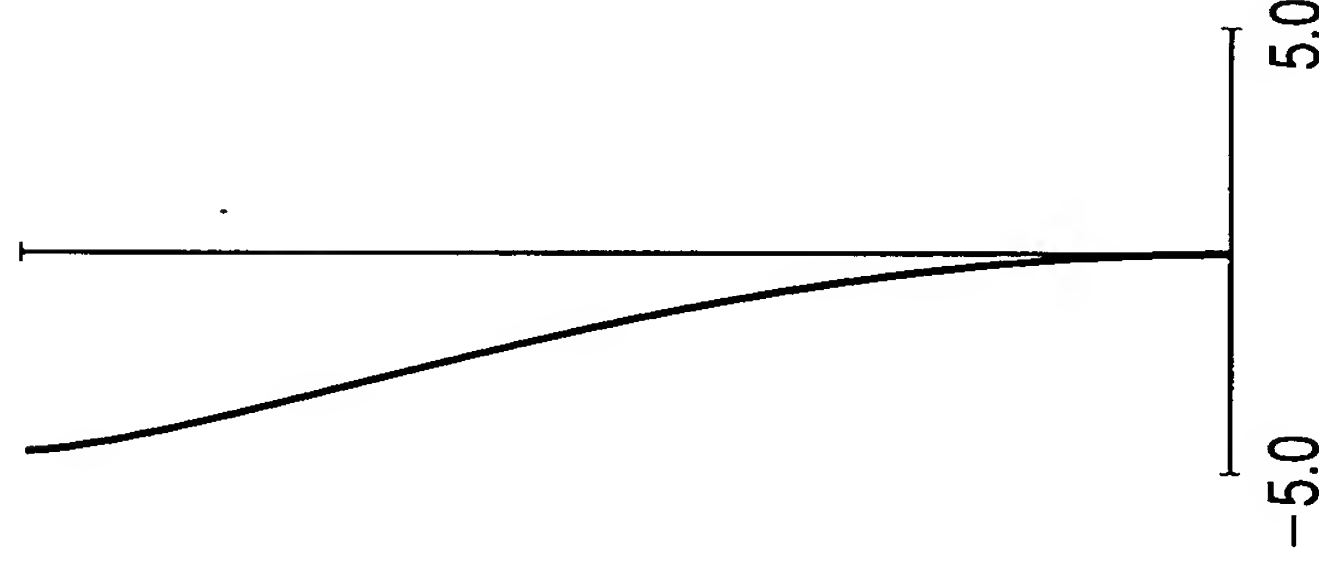
$\omega=31.60^\circ$



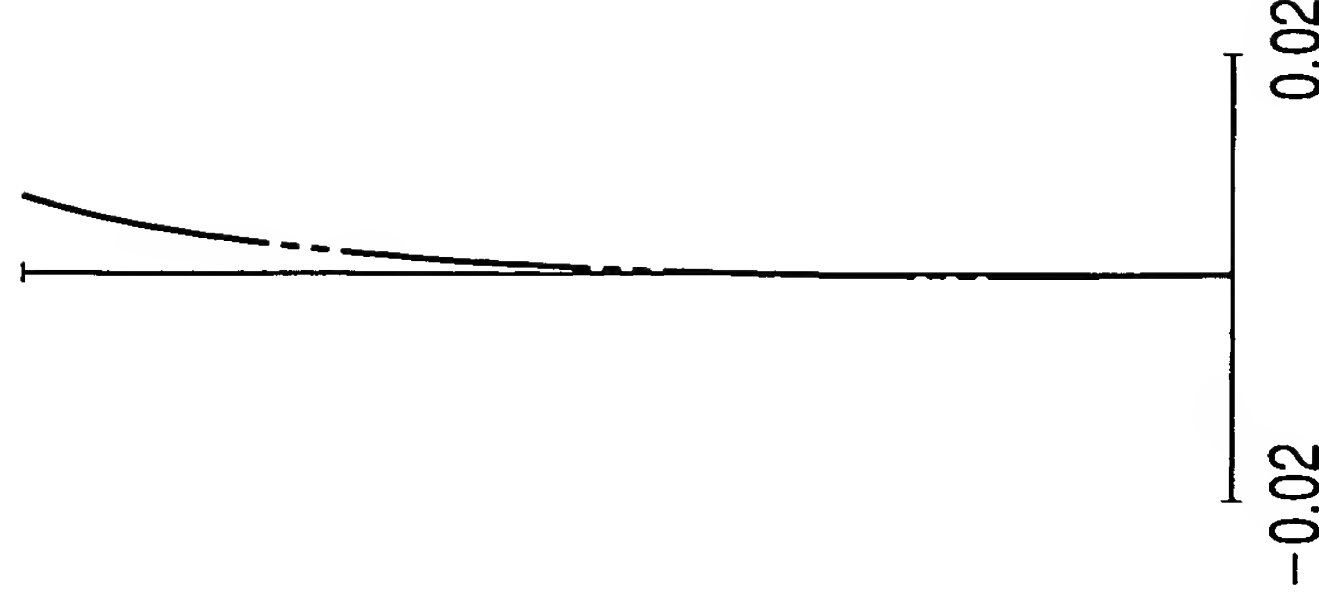
SPHERICAL  
ABERRATION



ASTIGMATISM

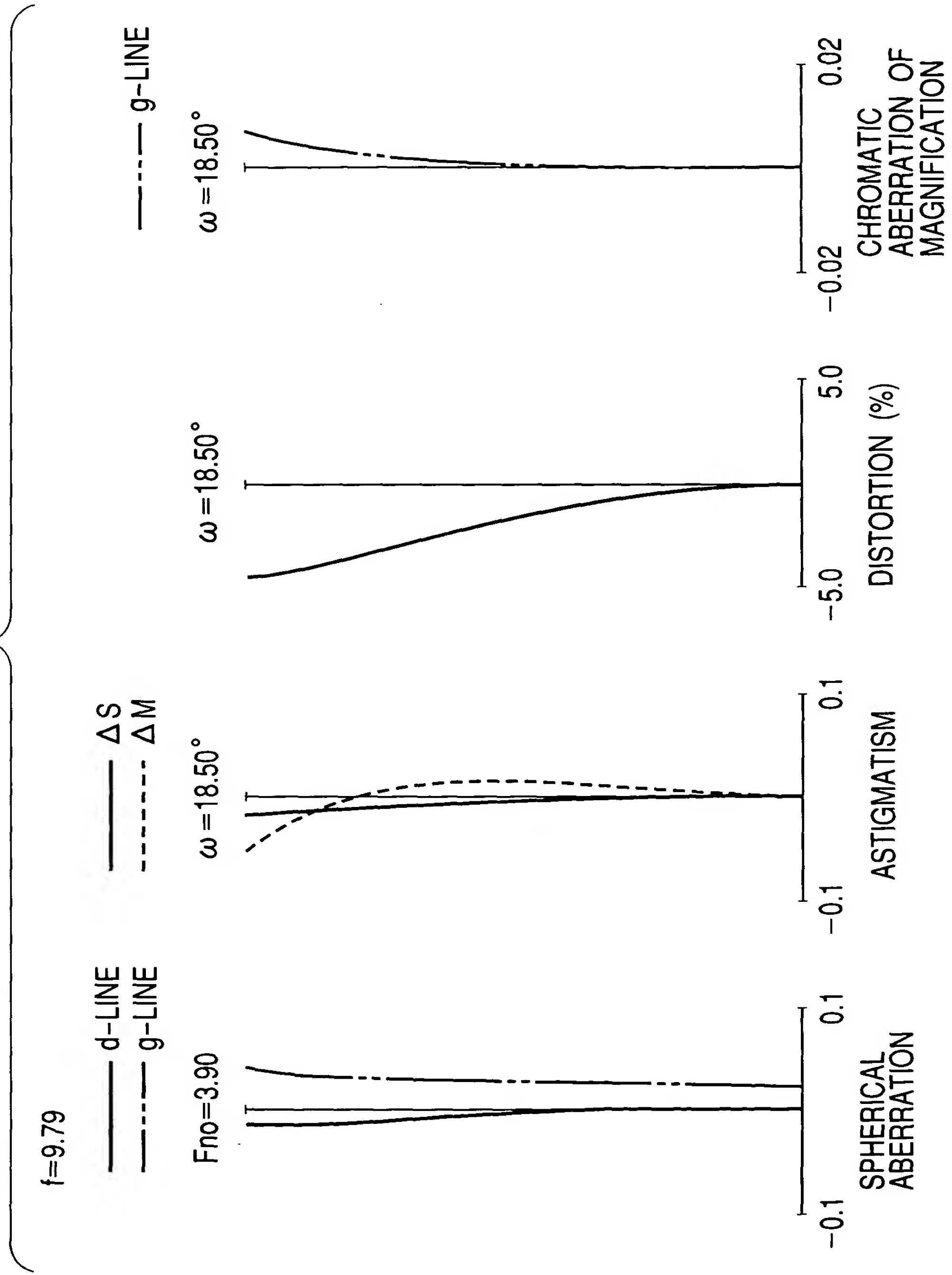


DISTORTION (%)

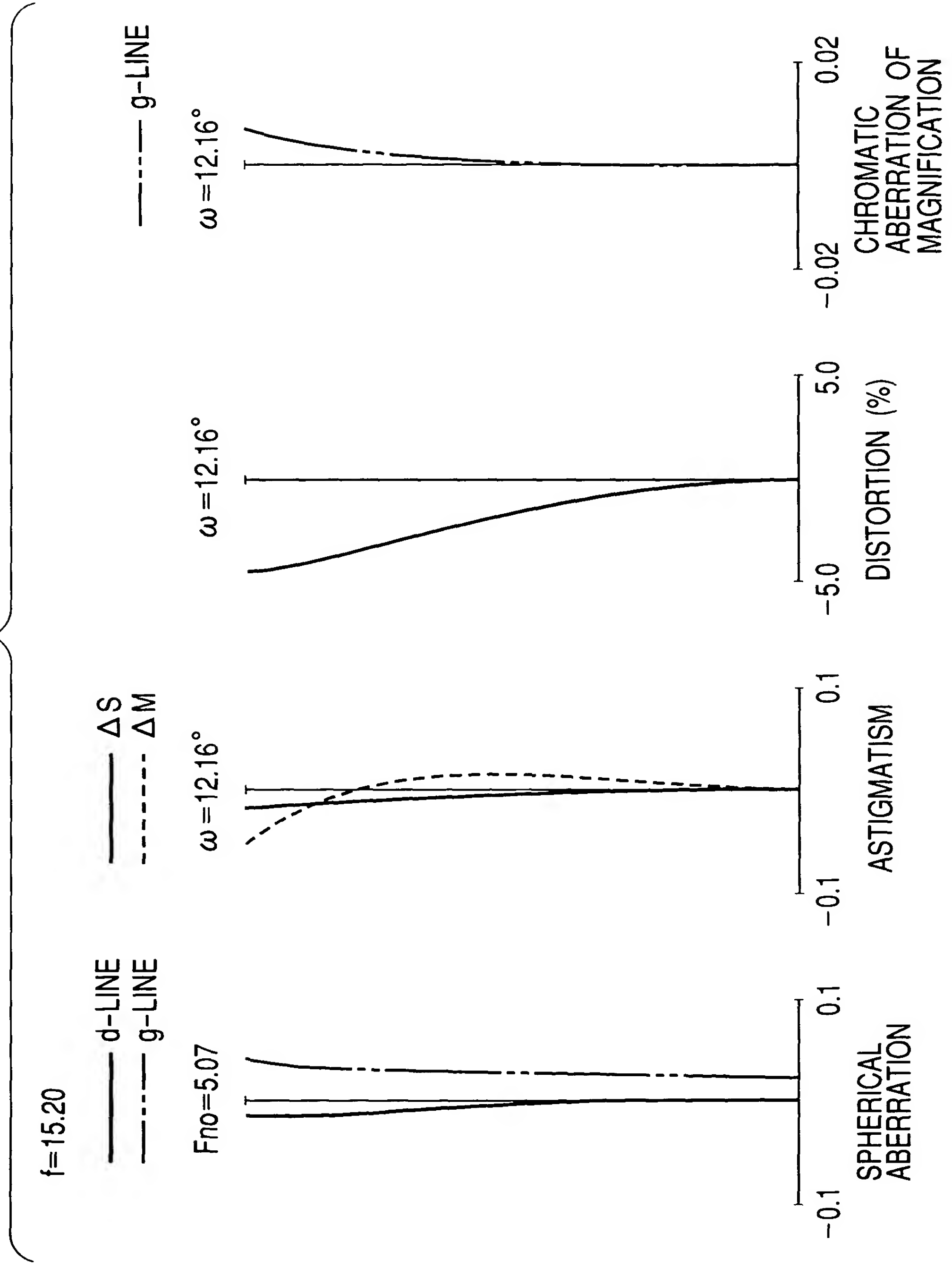


CHROMATIC  
ABERRATION OF  
MAGNIFICATION

FIG. 7

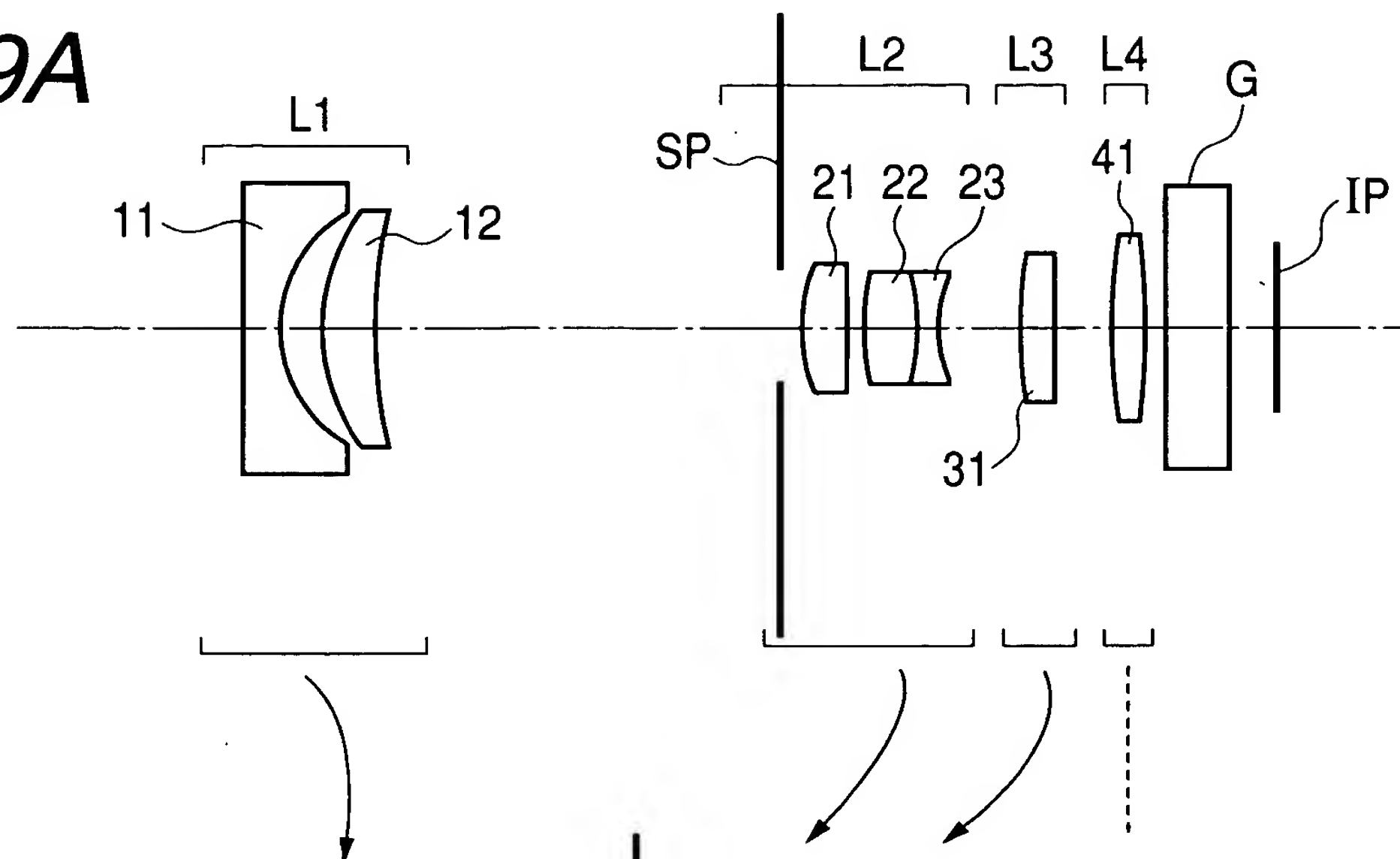


# FIG. 8

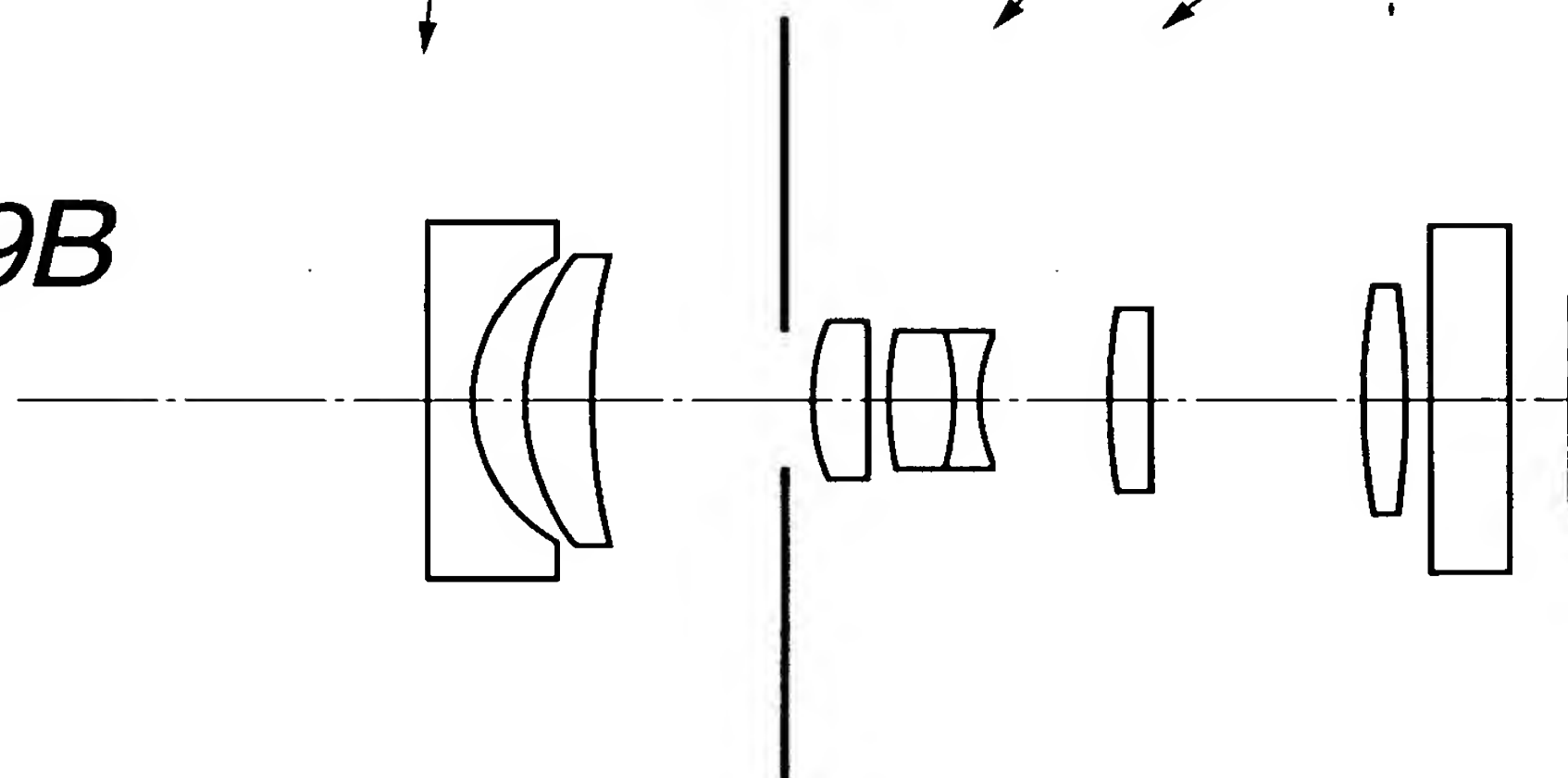




**FIG. 9A**



**FIG. 9B**



**FIG. 9C**

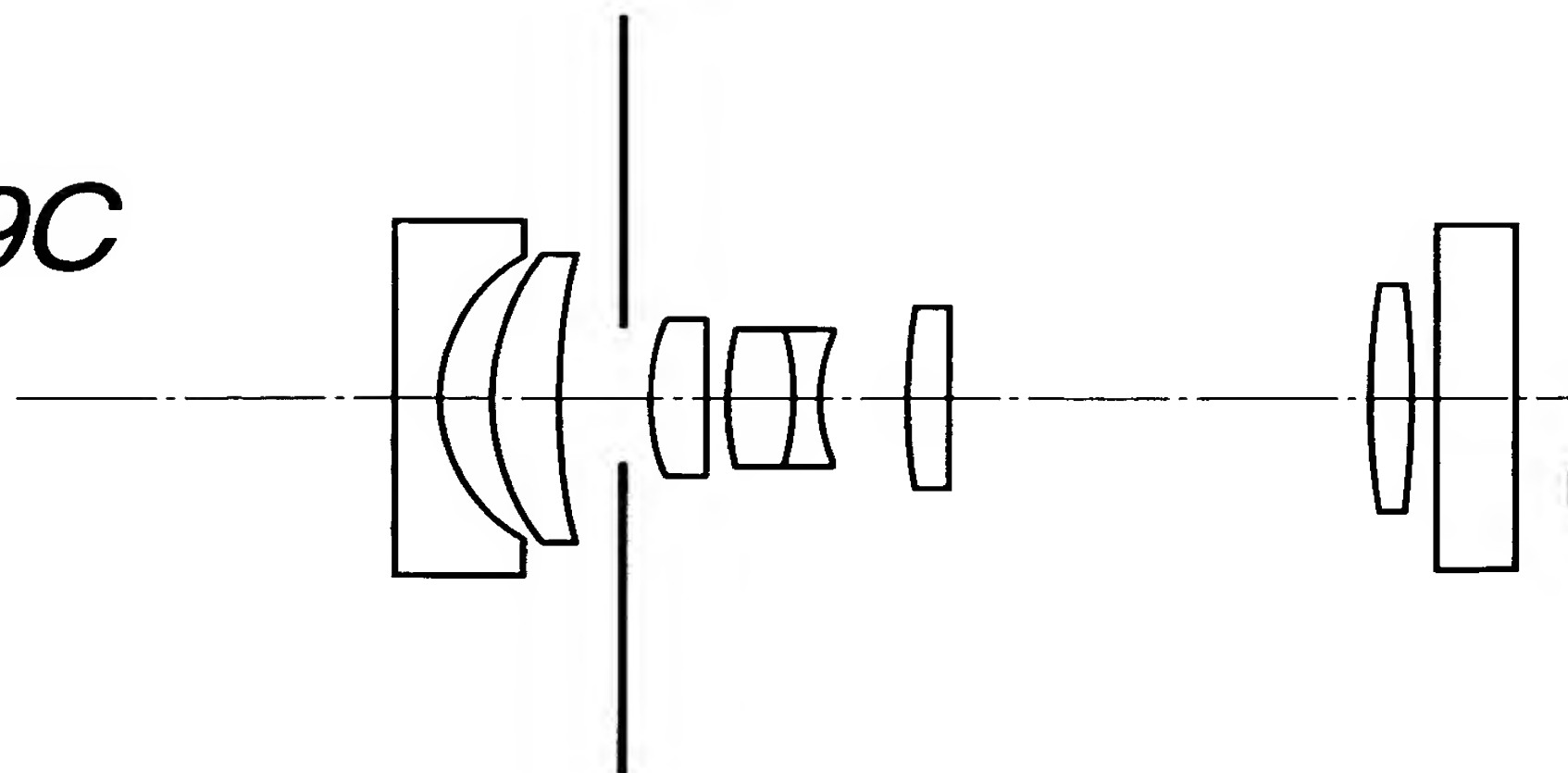


FIG. 10

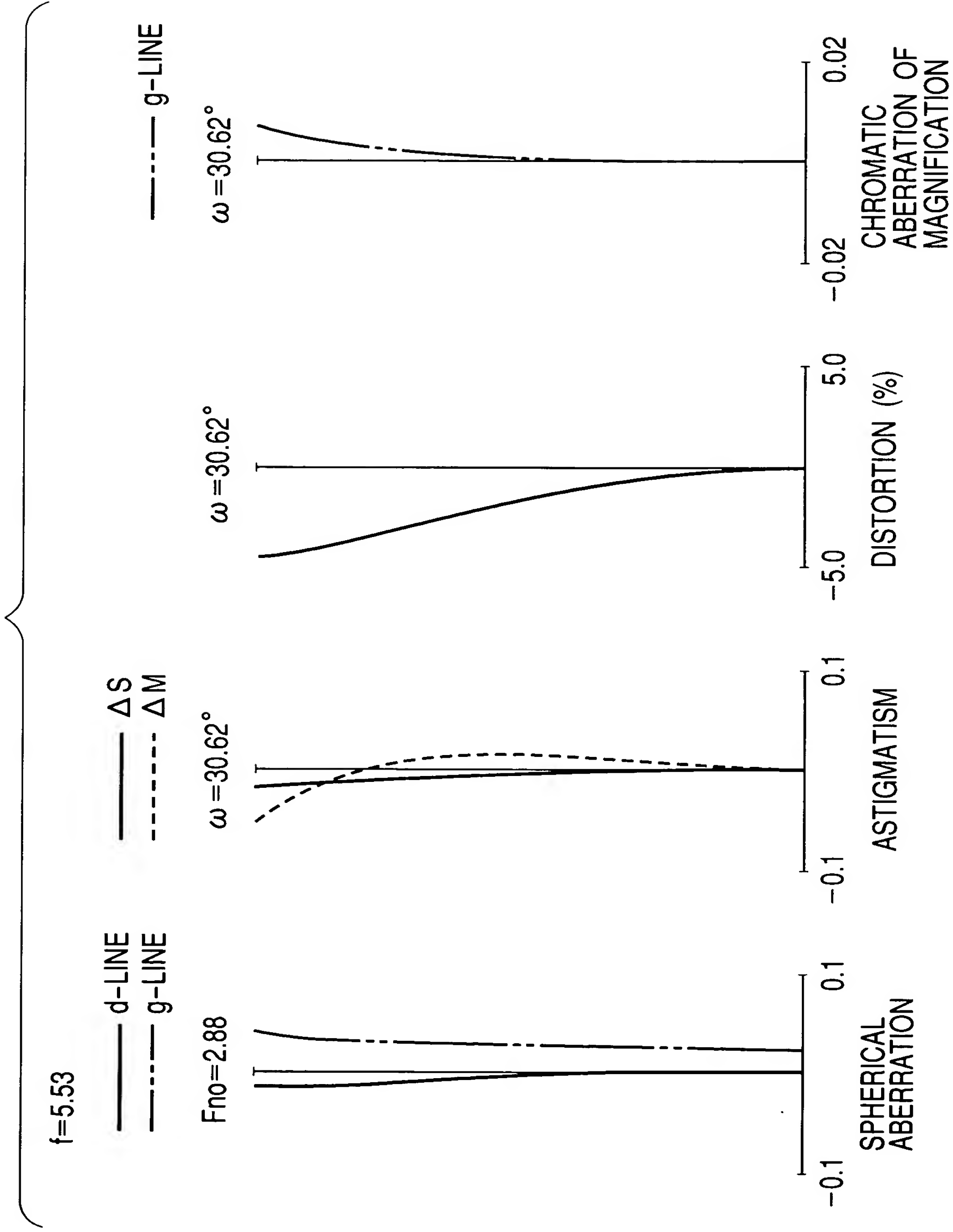
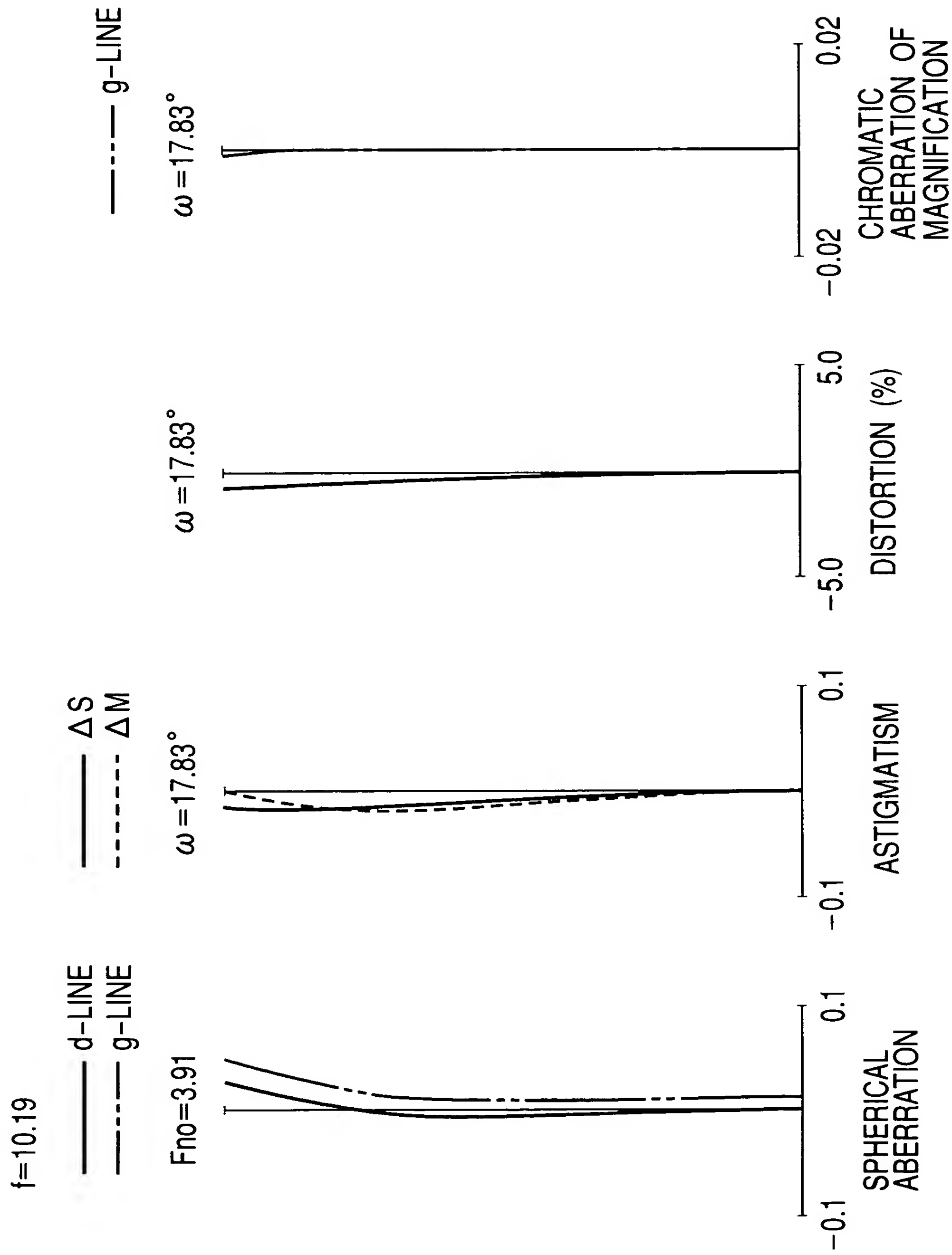
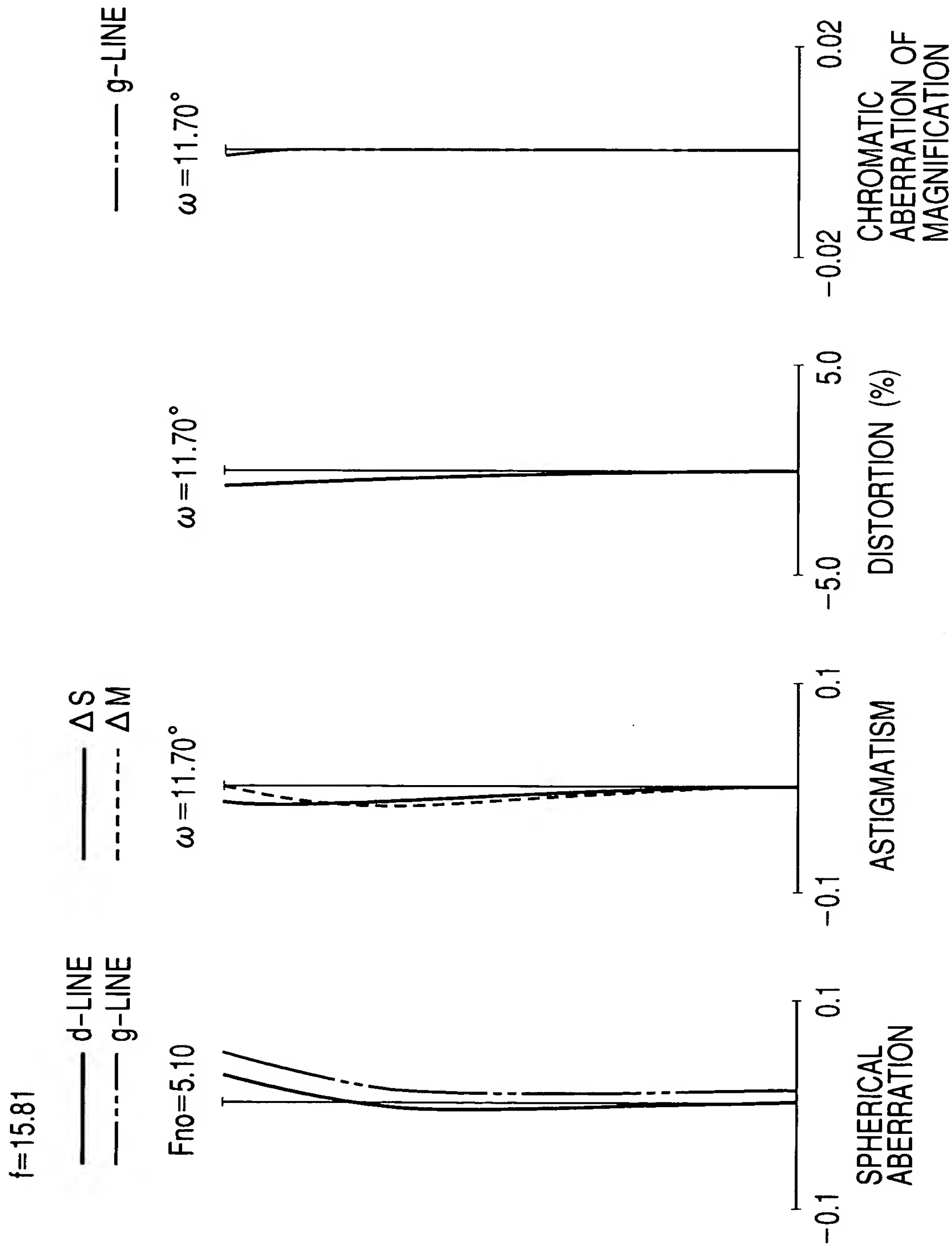


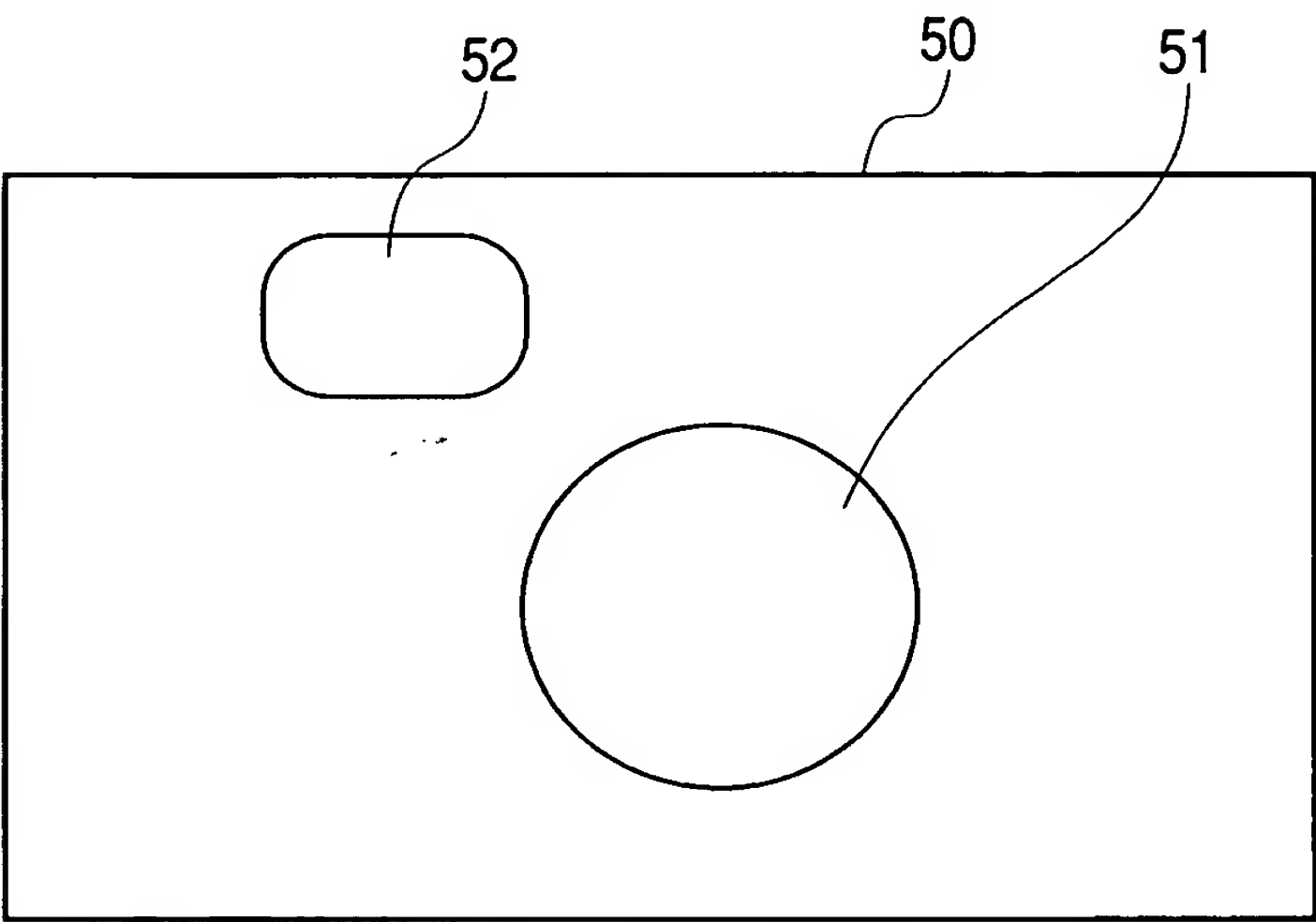
FIG. 11



# FIG. 12



**FIG. 13A**



**FIG. 13B**

